C320Turbo (PCI Express)

8 to 32-port intelligent PCI Express serial board

> PCI Express x 1 compliant
> Low profile form factor fits small-sized PCs
> Supports 128 high-performance serial ports per system
> Dramatically decreases host CPU load
> Modular design makes port expansion easy
> Monitor transmission status with LEDs on the module and two 7-segment displays
> Drivers provided for a broad selection of operating systems
> 460.8 Kbps maximum baudrate

PComm Lite

Overview

The intelligent C320Turbo PCI Express serial board is an expandable and versatile COM/TTY solution for RS-232/RS-422 applications that require connecting up to 128 serial devices to one computer. The

C320Turbo's on-board CPU and large dual-port memory alleviates the load of host system resources when performance and scalability are critical for large-scale systems.

Specifications

Hardware
Comm. Controller: 16C550C or compatible x 8
Bus: PCI Express x 1
Connector: DB25 female
Processor: TI DSP TMS320BC52PJ
Memory: 512 KB

Serial Interface
Number of Ports: 32 per control board (max.)
Serial Standards: RS-232 (RS-422 available with desktop option)
Max. No. of Boards per PC: 4

Performance
Baudrate: 50 bps to 460.8 Kbps

Serial Communication Parameters
Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd, Space, Mark
IRQ: Assigned by BIOS

Serial Signals
RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422: TxD+/-, RxD+/-, RTS+/-, CTS+/-, GND

Driver Support
Operating Systems: Windows 2000, Windows XP/2003/Vista/2008/7 x86/x64, Linux 2.4, Linux 2.6 x86/x64
Note: Please refer to Moxa's website for the latest driver support information.

Physical Characteristics
Dimensions: 135 x 67 mm (5.32 x 2.64 in)

Environmental Limits
Operating Temperature: 0 to 55°C (32 to 131°F)
Storage Temperature: -20 to 55°C (-4 to 131°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications
EMC: CE, FCC
EMI: EN 55022, FCC Part 15 Subpart B Class A
EMS: EN 61000-4-2, EN 61000-4-3, EN 61000-4-4
Green Product: RoHS, CRoHS, WEEE

Power Requirements
Power Consumption:
1,160 mA @ 3.3 V

Warranty
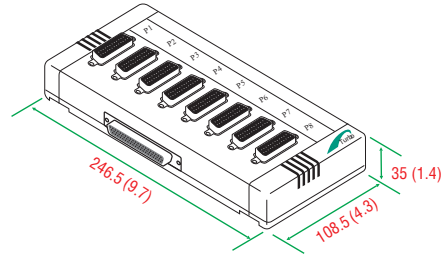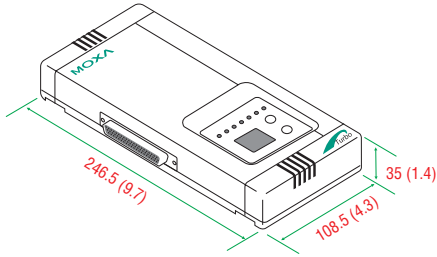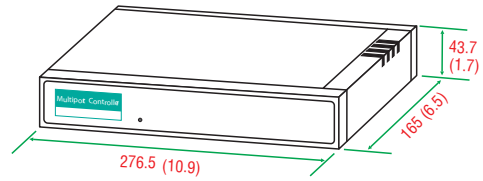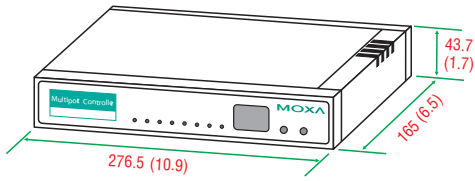**Warranty Period:** 5 years
Details: See www.moxa.com/warranty

MOXA®

Dimensions

Unit: mm (inch)

Desktop Solution

Rackmount Solution

	C32010T/PCIEL	C32030T	C32045T	C32047T	C32061T
Dimensions (mm)	67 x 135	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35
Weight (g)	80	425	500	485	488
Power Requirements	1.16A (3.3V)	0.59A (+5V)	0.28A (+5V)0.095A (+12V)0.06A (-12V)	0.28A (+5V)0.095A (+12V)0.06A (-12V)	0.485A (+5V)

	C32065T	C32071T	C32080T	C32081T	C32082T	C32083T
Dimensions (mm)	247 x 108 x 35	247 x 108 x 35	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44
Weight (g)	525	525	1020	1120	920	1000
Power Requirements	1.32A (+5V)	0.28A (+5V)0.095A (+12V)0.06A (-12V)	0.88A (+5V)0.095A (+12V)0.06A (-12V)	1.22A (+5V)0.19A (+12V)0.12A (-12V)	0.34A (+5V)0.095A (+12V)0.06A (-12V)	0.67A (+5V)0.19A (+12V)

: Ordering Information

Available Models

Control Boards (must choose one)
C32010T/PCIEL: PCI Express board

External Modules
Rack-mount Option
<u>**Basic Modules (must choose one)**</u>
C32080T: 8 RS-232 ports, 10-pin RJ45 connectors
C32081T: 16-port, RS-232, 10-pin RJ45

<u>**Expansion Modules (optional)**</u>
C32082T: 8 RS-232 ports, 10-pin RJ45 connectors
C32083T: 16 RS-232 ports, 10-pin RJ45 connectors
• Long-range Extension Kit (optional)
C32050T: Includes the following items
• 2 meter DB25-M to DB25-F 10-wire cable (generally used for set-up)
• 90-240 VAC switching power adaptor (0-30°C operating temperature)
NOTE: Build your own DB25-M to DB25-F 10-wire cable for connecting up to 100 meters.

Desktop Option
• CPU module
• One or more UART modules (32 ports maximum per board)
Rack-mount Option
• Basic module
• Zero or more expansion modules (32 ports maximum per board)

Connection Cable (required)
C32020T: 2 meter DB25-M to DB25-F cable with 25 pins for short-range usage

Desktop Option
<u>**CPU Module (required)**</u>
C32030T: Connects directly to one UART module
<u>**8-port UART Modules (choose at least one)**</u>
C32045T: RS-232, DB25-F connectors
C32047T: RS-232, DB25-M connectors
C32071T: RS-232, DB25-F connectors (25 KV ESD surge protection)
C32061T: RS-422, DB25-F connectors
C32065T: RS-422, DB25-F connectors (2 KV optical isolation)

Package Checklist

• 1 C320Turbo/PCI board
• Long-range extension kit (optional)
• Documentation and software CD
• Quick installation guide (printed)
• Warranty card